

Electroactive Polymer Actuator Braille Cell and Braille Display

Abstract

The present invention provides a Braille cell being of compact design and having low power consumption. The novel Braille cell is based on the bending characteristics of electroactive polymers to provide hydraulic actuation of a Braille dot. As such, the bending mechanism of the electroactive polymer actuator is transferred to the linear motion of the Braille dot. Additionally, to reduce power consumption, a latching and support mechanism is provided.